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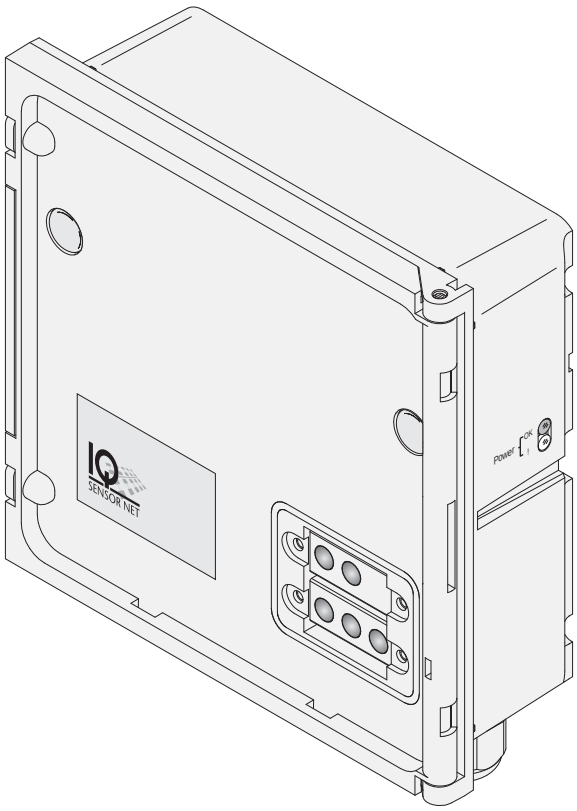
Operating Manual

IQ SENSOR NET
MIQ/JB



IQ SENSOR NET Branching module

ba76030e01 01/2012

Note
For the most recent version of the manual, please visit www.ysi.com.

Contact

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1 Overview

1.1 How to use this component operating manual

Structure of the IQ SENSOR NET operating manual

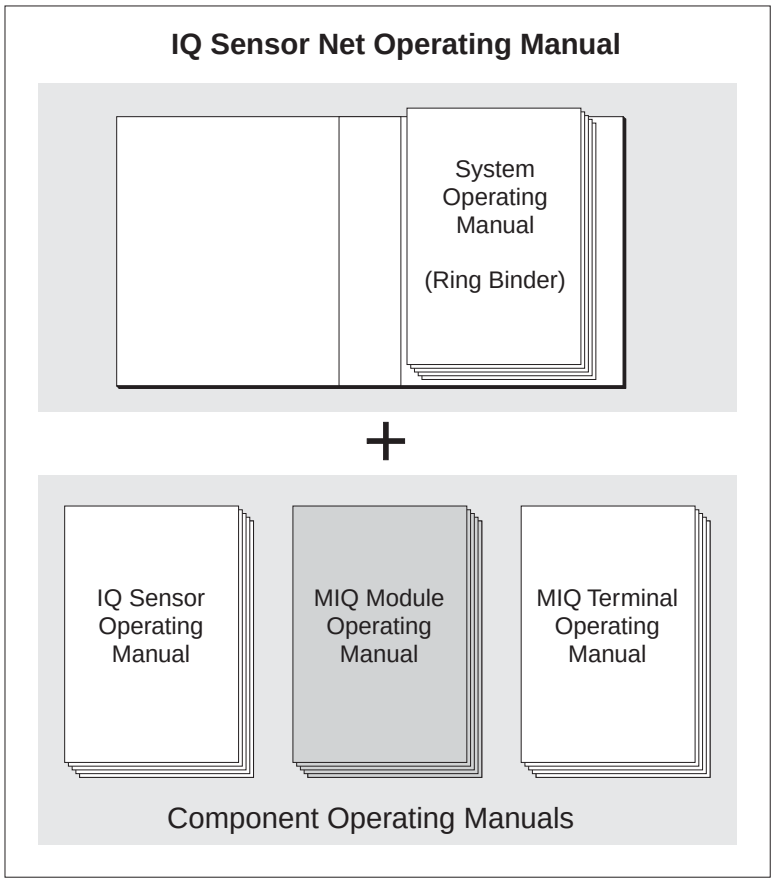


Fig. 1-1 Structure of the IQ SENSOR NET operating manual

The IQ SENSOR NET operating manual has a modular structure like the IQ SENSOR NET system itself. It consists of a system operating manual and the operating manuals of all the components used.

Please file these component operating manuals into the ring binder of the system operating manual.

1.2 Features of the MIQ/JB

General characteristics

The MIQ/JB branching module is used for the distributed mounting of the IQ SENSOR NET. It can be mounted at any position in a cable section.

The branching module can be used, for example, for:

- the branching of the IQ SENSOR NET, e.g. in order to integrate several measurement locations spread out in the system
- the multiple connection of sensors via the SACIQ sensor connection cable, e.g. at the edge of the basin
- setting up an operating site, i.e. the branching module provides a possibility for the docking of terminal components.

The MIQ/JB simplifies the star-shaped configuration of the IQ SENSOR NET for the optimum power supply of all components by power supply modules (see chapter INSTALLATION of the IQ SENSOR NET system operating manual). If necessary, the number of available connections at a single location can be increased by stacked mounting of further MIQ modules.

With the standard MIQ module housing, the MIQ/JB has the same characteristics as all MIQ modules regarding stability, leakproofness and weather resistance. It also provides the same wide variety of installation options (stacked mounting, canopy mounting, tophat rail mounting, etc.).

As many branching modules as required can be installed in a single IQ SENSOR NET system.

Terminal strip

The MIQ/JB has four equal SENSORNET connections on the terminal strip inside the housing that can be used for all the purposes described above.

2 Safety instructions

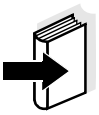
This component operating manual contains special instructions that must be followed during the installation of the branching module. Thus, it is essential to read this component operating manual before carrying out any work with the system. In addition to this manual, the SAFETY chapter of the IQ SENSOR NET system operating manual must be followed.

Always keep this component operating manual together with the system operating manual and all other component operating manuals in the vicinity of the IQ SENSOR NET system.

Directions

The following symbols indicate special features in the individual chapters of this operating manual:

Note
indicates notes that draw your attention to special features.



Note
indicates cross-references to other documents, e.g. operating manuals.

2.1 Authorized use

The authorized use of the MIQ/JB consists of its use as a branching module in the IQ SENSOR NET.
The technical specifications given in chapter 5 TECHNICAL DATA must be observed. Only operation according to the instructions in this operating manual is authorized.

Any other use is considered to be **unauthorized**. Unauthorized use invalidates any claims with regard to the guarantee.

2.2 General safety instructions

The MIQ/JB is constructed and inspected in accordance with the relevant guidelines and norms for electronic instruments (see chapter 5 TECHNICAL DATA).
It left the factory in a safe and secure technical condition.

Function and operating safety

The failure-free function and operational safety of the MIQ/JB is only guaranteed if the generally applicable safety measures and the special safety instructions in this operating manual are followed during its use.

The failure-free function and operational safety of the MIQ/JB is only guaranteed under the environmental conditions that are specified in chapter 5 TECHNICAL DATA.

Safe operation

If safe operation is no longer possible, the MIQ/JB must be taken out of operation and secured against inadvertent operation.
Safe operation is no longer possible if the MIQ/JB:

- has been damaged in transport
- has been stored under adverse conditions for a lengthy period of time
- is visibly damaged
- no longer operates as described in this manual.

If you are in any doubt, contact the supplier of your MIQ/JB.

3 Installation

3.1 Scope of delivery

The scope of delivery of the MIQ/JB is listed in the INSTALLATION chapter of the system operating manual.

3.2 Installation in the IQ SENSOR NET

The IQ SENSOR NET provides a number of options for integrating the MIQ/JB mechanically and electrically in the system (stacked mounting, distributed mounting, etc.). The various types of installation are described in detail in the INSTALLATION chapter of the system operating manual.

Terminal strip

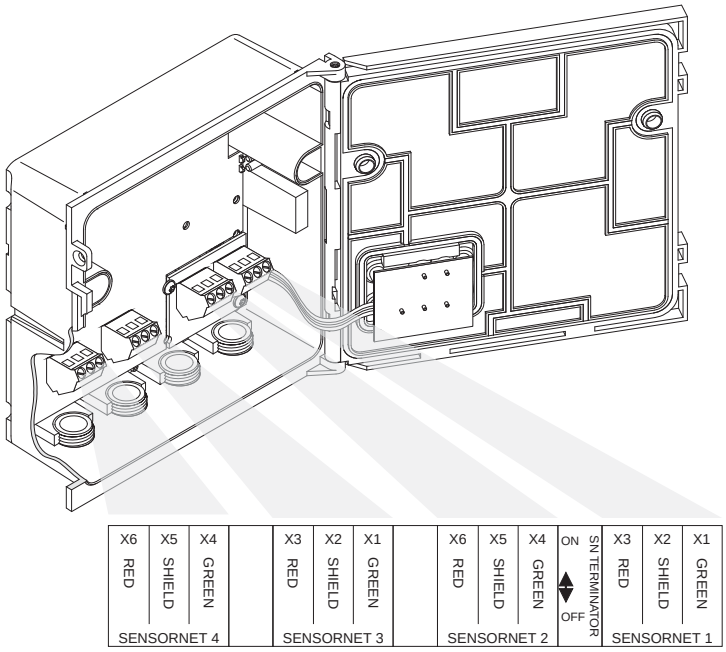


Fig. 3-1 Terminal strip of the MIQ/JB

All SENSORNET connections are identical and can be used as required for extending/branching the cable section or for the connection of sensors.

4 Maintenance and cleaning

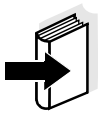
4.1 Maintenance

The MIQ/JB requires no special maintenance. The general maintenance of IQ SENSOR NET components is described in the IQ SENSOR NET system operating manual.

4.2 Cleaning

The cleaning of IQ SENSOR NET components is described in the IQ SENSOR NET system operating manual.

5 Technical data



Note
General technical data on MIQ modules are given in the TECHNICAL DATA chapter of the IQ SENSOR NET system operating manual.

Electrical data

Nominal voltage	Max. 24 VDC via the IQ SENSOR NET (for details, see chapter TECHNICAL DATA of the IQ SENSOR NET system operating manual).
Power consumption	Approx. 0.1 W
Protective class	III
Number of MIQ/JB in a IQ SENSOR NETsystem	Any

Instrument safety

Applicable norms	– EN 61010-1 – UL 3111-1 – CAN/CSA C22.2 No. 1010.1

Terminal connections

IQ SENSOR NET connections	4 Additional connectable SENSORNET terminator (terminating resistor)
Terminal type	Screw-type terminal strip, accessible by raising the lid
Terminal ranges	Solid wires: 0.2 ... 4.0 mm^2 AWG 24 ... 12 Flexible wires: 0.2 ... 2.5 mm^2
Cable feeds	4 cable glands M16 x 1.5 on the underside of the module

6 Contact Information

6.1 Ordering & Technical Support

Telephone: (800) 897-4151
(937) 767-7241
Monday through Friday, 8:00 AM to 5:00 PM ET

Fax: (937) 767-1058

Email: environmental@ysi.com

Mail: YSI Incorporated
1725 Brannum Lane
Yellow Springs, OH 45387
USA

Internet: www.ysi.com

When placing an order please have the following information available:

YSI account number (if available)	Name and Phone Number
Model number or brief description	Billing and shipping address
Quantity	Purchase Order or Credit Card

6.2 Service Information

YSI has authorized service centers throughout the United States and Internationally. For the nearest service center information, please visit www.ysi.com and click ‘Support’ or contact YSI Technical Support directly at 800-897-4151.

When returning a product for service, include the Product Return form with cleaning certification. The form must be completely filled out for an YSI Service Center to accept the instrument for service. The Product Return form may be downloaded at www.ysi.com and clicking on the ‘Support‘ tab.

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